CLAIMS

1. A method for identifying a subject at risk for a non-Alzheimer's neurological disease consisting of Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis, neurofibromatosis, depression, multiple sclerosis, stroke, and multi-infarct dementia, comprising determining the genotype at nucleotide 192 of the GPIIIa gene of SEQ ID NO.: 2, wherein the gene encodes a polypeptide with a proline at amino acid position 33 of SEQ ID NO.: 4, and/or at nucleotide 2622 of GPIIb of gene of SEQ ID NO.: 6, wherein the gene encodes a polypeptide with a serine at amino acid position 843 of SEQ ID NO.: 8, of said subject, wherein said genotype is indicative of said subject having an increased risk for said non-Alzheimer's neurological disease.

2. A method for diagnosing a subject with a non-Alzheimer's neurological disease consisting of Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis, neurofibromatosis, depression, multiple sclerosis, stroke, and multi-infarct dementia, comprising determining the genotype at nucleotide 192 of the GPIIIa gene of SEQ ID NO.: 2, wherein the gene encodes a polypeptide with a proline at amino acid position 33 of SEQ ID NO.: 4, and/or at nucleotide 2622 of the GPIIb gene of SEQ ID NO.: 6, wherein the gene encodes a polypeptide with a serine at amino acid position 843 of SEQ ID NO.: 8, of said subject, wherein said genotype is indicative of said subject having said non-Alzheimer's neurological disease.

3. A method for characterizing the genotype of at least one subject involved in a clinical trial of a therapy for the treatment of a non-Alzheimer's neurological disease consisting of Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis, neurofibromatosis, depression, multiple sclerosis, stroke, and

multi-infarct dementia, comprising determining the genotype at nucleotide 192 of the GPIIIa gene of SEQ ID NO.: 2, wherein the gene encodes a polypeptide with a proline at amino acid position 33 of SEQ ID NO.: 4, and/or at nucleotide 2622 of the GPIIb gene of SEQ ID NO.: 6, wherein the gene encodes a polypeptide with a serine at amino acid position 843 of SEQ ID NO.: 8, of said subject.

4. The method of claim 1, 2, or 3, wherein said method comprises determining said genotype at nucleotide 192 of the GPIIIa gene and at nucleotide 2622 of the GPIIb gene of said subject and said genotype places said subject into a subgroup for said clinical trial.

5. The method of claim 1, 2, or 3, wherein said determining is performed using a nucleic acid molecule that specifically binds a GPIIIa nucleic acid molecule.

6. The method of claim 1, 2, or 3, wherein said determining is performed using a nucleic acid molecule that specifically binds a GPIIb nucleic acid molecule.

7. The method of claim 1, 2, or 3, wherein said genotype is T/C at nucleotide 192 of SEQ ID NO: 2.

8. The method of claim 1, 2, or 3, wherein said genotype is T/G at nucleotide 2622 of SEQ ID NO: 6.

9. The method of claim 1, 2, or 3, wherein said GPIIIa gene encodes a polypeptide with a proline at amino acid position 33 of SEQ ID NO: 4.

10. The method of claim 1, 2, or 3, wherein said GPIIb gene encodes a polypeptide with a serine at amino acid position 843 of SEQ ID NO: 8.

11. The method of claim 3, wherein said genotype is indicative of the efficacy or therapeutic benefits of said therapy.

12. The method of claim 1, 2, or 3, wherein said determining the genotype at nucleotide 192 of the GPIIIa gene comprises performing restriction enzyme digestion of an amplified product of a GPIIIa nucleic acid molecule using the enzyme MspI.

13. The method of claim 12, wherein said amplified product is a polymerase chain reaction product and said GPIIIa nucleic acid molecule is a GPIIIa gene or a GPIIIa cDNA.

14. The method of claim 1, 2, or 3, wherein said determining the genotype at nucleotide 2622 of the GPIIb gene comprises performing restriction enzyme digestion of an amplified product of a GPIIb nucleic acid molecule using the enzyme HaeII.

15. The method of claim 14, wherein said amplified product is a polymerase chain reaction product and said GPIIb nucleic acid molecule is a GPIIb gene or a GPIIb cDNA.